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09/945,104	08/31/2001	J.J. Garcia-Luna-Aceves	UC2000-385-2	2125

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EXAMINER

BELL, MELTIN

ART UNIT	PAPER NUMBER
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2121

DATE MAILED: 02/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/945,104

Applicant(s)

GARCIA-LUNA-ACEVES ET AL.

Examiner

Meltin Bell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☒ Claim(s) 11 and 25 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4-6. 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

This action is responsive to application **09/945,104** filed 08/31/01.

Claims 1-36 have been examined.

#### ***Priority***

Applicant's claim for domestic priority against application number 60/226,646 filed **8/31/00** under 35 U.S.C. 119(e) is acknowledged.

#### ***Information Disclosure Statement***

Applicant is respectfully reminded of the ongoing Duty to disclose 37 C.F.R. 1.56 all pertinent information and material pertaining to the patentability of applicant's claimed invention, by submitting in a timely manner PTO-1449, Information Disclosure Statement (IDS) with the filing of applicant's application or thereafter.

The information disclosure statement filed 4/23/02 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because of missing or inaccurate information in the listing:

- Confirmation of the publishing date is missing from the Gonnet (et al) reference.

The information disclosure statement filed 3/29/02 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because of missing or inaccurate information in the listing:

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- Confirmation of the publishing date is missing from the Waldvogel et al, Bremner-Barr et al, Brodnik/Degermark et al, Chandranmenon et al, Guo et al, Gupta et al, Sola et al and "Fast and Scalable Four Layer Switching" references.
- Confirmation of the website date is missing or inaccurate for the Briscoe et al reference.
- The Estrin et al, Merit Network, Micron Technology, Sola et al and "ARIS: Aggregate Route-Based IP Switching" references are files on a hard drive vs. public documents.
- The "ARIS: Aggregate Route-Based IP Switching" reference's date of publication doesn't match the document.

It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e).

See MPEP § 609 ¶ C(1).

### ***Drawings***

The United States Patent and Trademark Office of Draftsperson's Patent Drawings Review have reviewed the formal drawings.

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The drawings have not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is required in correcting any errors of which applicant may become aware in the drawings.

The drawings are objected to because:

- Fig. 5 item number labels should terminate at the text described on page 15, lines 13-14.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Specification***

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is required in correcting any errors of which applicant may become aware in the specification.

### ***Claim Objections***

Claims 11 and 25 are objected to because of the following informalities:

#### **Regarding claim 11:**

- 'corresponding' confuses the claim's meaning.

#### **Regarding claim 25:**

- 'corresponding' confuses the claim's meaning.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 1 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As a method, claim 1 offers abstract ideas (e.g. "routing-table entries", "numbered clusters", "destination address") that are also not embodied in the technological arts. Abstract ideas and their manipulation constitute "descriptive material" that is not patentable, *Warmerdam*, 33 F.3d at 1360, 31 USPQ2d at 1759 and *Schrader*, 22 F.3d at 292-93, 30 USPQ2d at 1457-58, respectively. If claim 1 was amended to recite a computer-implemented method it will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. For examples,

- *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) offers claim to data structure stored on a computer readable medium that increases computer efficiency held statutory and
- *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ2d at 1759 offers product-by-process claim to computer having a specific data structure stored in memory also held statutory while
- *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 offers claim to a data structure *per se* held nonstatutory.

Because the ideas are not claimed to be practiced on a computer and/or stored on a computer readable medium, they are not limited to practical applications in the technological arts. Specifically, the claim is a method without any particular practical application, such as a program running on a computer and stored in a computer readable medium or memory. On that basis alone, the claim is clearly nonstatutory.

***Claim Rejections - 35 USC § 102***

To expedite a complete examination of the instant application, the claims rejected under 35 U.S.C. 101 (nonstatutory) above are further rejected as set forth below in anticipation of applicant amending these claims to place them within the four statutory categories of invention.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-36 are rejected under 35 U.S.C. 102(e) as being anticipated by *Donahue et al* U.S. Patent Number 6,101,180 (Issued August 8, 2000; Filed November 12, 1997).

**Regarding claim 1:**

*Donahue et al* teaches,

- grouping routing-table entries into numbered clusters for lookup of a routing-table entry based on cluster number and destination address (column 7, lines 6-11, "At each

interconnection...to all routers”; column 10, lines 1-14, “The ISP or...a conflicting address”; column 22, lines 42-65, “The Channel Cluster...number of channels”; column 23, lines 1-7, “The overall table...number of clusters”; column 27, lines 48-61, “The packet filter...standard Ethernet proto-cols”)

**Regarding claim 2:**

*Donahue et al* further teaches,

- assigning a cluster number to a data packet (column 8, lines 26-47, “IP Multicast uses...different permanent addresses”)

**Regarding claim 3:**

*Donahue et al* further teaches,

- routing said data packet based on a routing-table entry selected from a group of routing-table entries based on said cluster number and a destination address associated with said data packet (column 10, lines 15-31, “The address re-routing...as defined below”)

**Regarding claim 4:**

*Donahue et al* further teaches,

- replacing said cluster number of said data packet with a new cluster number when said packet is routed (column 10, lines 33-53, “an agent might...will be tried”)



**Regarding claim 5:**

*Donahue et al* further teaches,

- matching the cluster number associated with said data packet to a corresponding cluster number associated with said routing-table entries (column 28, lines 55-67, "the packet filter...be transmitted onto"; column 29, lines 1-5, "the LAN 220...be read again")

**Regarding claim 6:**

*Donahue et al* further teaches,

- searching routing-table entries associated with said cluster number using a destination address associated with said data packet as an index (Fig. 18, item 615; Fig. 20, item 650; column 28, lines 44-50, "The field programmable... SRAM bus architecture"; column 22, lines 42-65, "The Channel Cluster...number of channels"; column 23, lines 1-7, "The overall table...number of clusters")

**Regarding claim 7:**

The rejection of claim 6 is incorporated. Therefore, claim 7 is rejected under the same rationale as claim 6.

**Regarding claim 8:**

*Donahue et al* further teaches,

- replacing said cluster number of said data packet with a new cluster number when said packet is routed (column 10, lines 33-53, "an agent might...will be tried")

**Regarding claim 9:**

*Donahue et al* further teaches,

- assigning a Cluster Number (Incoming) and a Cluster Number (Outgoing) to each routing table entry (column 7, lines 6-11, "At each interconnection...to all routers"; column 8, lines 26-47, "IP Multicast uses...different permanent addresses"; column 34, lines 50-67, lines "The transponder unit...be implemented, the connec-"; column 35, lines 1-26, "tors between the printed...the transponder unit")

**Regarding claim 10:**

*Donahue et al* further teaches,

- assigning a Cluster Number (Incoming) to said data packet (column 17, lines 46-53, "the controller unit...individual transponder units"; column 27, lines 48-61, "The packet filter...standard Ethernet proto-cols")

**Regarding claim 11:**

*Donahue et al* further teaches,

- routing said data packet based on a routing-table entry selected from a group of routing-table entries corresponding based on said Cluster Number (Incoming) and a destination address associated with said data packet (column 10, lines 15-31, "The address re-routing...as defined below")

**Regarding claim 12:**

*Donahue et al* further teaches,

- replacing said Cluster Number (Incoming) of said data packet with the Cluster Number (Outgoing) associated with said selected routing-table entry when said data packet is routed (column 10, lines 33-53, "an agent might...will be tried")

**Regarding claim 13:**

*Donahue et al* further teaches,

- matching the Cluster Number (Incoming) associated with said data packet to a corresponding Cluster Number (Incoming) associated with said routing-table entries (column 28, lines 55-67, "the packet filter...be transmitted onto"; column 29, lines 1-5, "the LAN 220...be read again")

**Regarding claim 14:**

*Donahue et al* further teaches,

- searching routing-table entries associated with said Cluster Number (Incoming) using a destination address associated with said data packet as an index (Fig. 18, item 615; Fig. 20, item 650; column 28, lines 44-50, "The field programmable...SRAM bus architecture"; column 22, lines 42-65, "The Channel Cluster...number of channels"; column 23, lines 1-7, "The overall table...number of clusters")

**Regarding claim 15:**

*Donahue et al* further teaches,

- routing said data packet using a routing-table entry corresponding to said destination address (column 10, lines 15-31, "The address re-routing...as defined below")

**Regarding claim 16:**

*Donahue et al* further teaches,

- replacing said Cluster Number (Incoming) of said data packet with the Cluster Number (Outgoing) associated with said corresponding routing-table entry when said data packet is routed (column 10, lines 33-53, "an agent might...will be tried")

**Regarding claim 17:**

*Donahue et al* further teaches,

- grouping routing-table entries into numbered clusters for lookup of a routing-table entry based on cluster number and destination address (column 7, lines 6-11, "At each interconnection...to all routers"; column 10, lines 1-14, "The ISP or...a conflicting address"; column 22, lines 42-65, "The Channel Cluster...number of channels"; column 23, lines 1-7, "The overall table...number of clusters"; column 27, lines 48-61, "The packet filter...standard Ethernet proto-cols")
- routing a data packet based on a routing-table entry selected from a group of routing-table entries based on a cluster number and a destination address associated with said data packet (column 10, lines 15-31, "The address re-routing...as defined below")

**Regarding claim 18:**

*Donahue et al* further teaches,

- replacing said cluster number of said data packet with a new cluster number when said packet is routed (column 10, lines 33-53, "an agent might...will be tried")

**Regarding claim 19:**

*Donahue et al* further teaches,

- matching the cluster number associated with said data packet to a corresponding cluster number associated with said routing-table entries (column 28, lines 55-67, "the packet filter...be transmitted onto"; column 29, lines 1-5, "the LAN 220...be read again")

**Regarding claim 20:**

*Donahue et al* further teaches,

- searching routing-table entries associated with said cluster number using a destination address associated with said data packet as an index (Fig. 18, item 615; Fig. 20, item 650; column 28, lines 44-50, "The field programmable... SRAM bus architecture"; column 22, lines 42-65, "The Channel Cluster...number of channels"; column 23, lines 1-7, "The overall table...number of clusters")

**Regarding claim 21:**

The rejection of claim 20 is incorporated. Therefore, claim 21 is rejected under the same rationale as claim 20.

**Regarding claim 22:**

*Donahue et al* further teaches,

- replacing said cluster number of said data packet with a new cluster number when said packet is routed (column 10, lines 33-53, "an agent might...will be tried")

**Regarding claim 23:**

*Donahue et al* further teaches,

- assigning a Cluster Number (Incoming) and a Cluster Number (Outgoing) to each routing table entry (column 7, lines 6-11, "At each interconnection...to all routers"; column 8, lines 26-47, "IP Multicast uses...different permanent addresses"; column 34, lines 50-67, lines "The transponder unit...be implemented, the connec-"; column 35, lines 1-26, "tors between the printed...the transponder unit")

**Regarding claim 24:**

*Donahue et al* further teaches,

- assigning a Cluster Number (Incoming) to said data packet (column 17, lines 46-53, "the controller unit...individual transponder units"; column 27, lines 48-61, "The packet filter...standard Ethernet proto-cols")

**Regarding claim 25:**

*Donahue et al* further teaches,

- routing said data packet based on a routing-table entry selected from a group of routing-table entries corresponding based on said Cluster Number (Incoming) and a destination address associated with said data packet (column 10, lines 15-31, "The address re-routing...as defined below")

**Regarding claim 26:**

*Donahue et al* further teaches,

- replacing said Cluster Number (Incoming) of said data packet with the Cluster Number (Outgoing) associated with said selected routing-table entry when said data packet is routed (column 10, lines 33-53, “an agent might...will be tried”)

**Regarding claim 27:**

*Donahue et al* further teaches,

- matching the Cluster Number (Incoming) associated with said data packet to a corresponding Cluster Number (Incoming) associated with said routing-table entries (column 28, lines 55-67, “the packet filter...be transmitted onto”; column 29, lines 1-5, “the LAN 220...be read again”)

**Regarding claim 28:**

*Donahue et al* further teaches,

- searching routing-table entries associated with said Cluster Number (Incoming) using a destination address associated with said data packet as an index (Fig. 18, item 615; Fig. 20, item 650; column 28, lines 44-50, “The field programmable...SRAM bus architecture”; column 22, lines 42-65, “The Channel Cluster...number of channels”; column 23, lines 1-7, “The overall table...number of clusters”)

**Regarding claim 29:**

*Donahue et al* further teaches,

- routing said data packet using a routing-table entry corresponding to said destination address (column 10, lines 15-31, “The address re-routing...as defined below”)

**Regarding claim 30:**

*Donahue et al* further teaches,

- replacing said Cluster Number (Incoming) of said data packet with the Cluster Number (Outgoing) associated with said corresponding routing-table entry when said data packet is routed (column 10, lines 33-53, "an agent might...will be tried")

**Regarding claim 31:**

*Donahue et al* further teaches,

- grouping routing-table entries into numbered clusters for lookup of a routing-table entry based on cluster number and destination address (column 7, lines 6-11, "At each interconnection...to all routers"; column 10, lines 1-14, "The ISP or...a conflicting address"; column 22, lines 42-65, "The Channel Cluster...number of channels"; column 23, lines 1-7, "The overall table...number of clusters"; column 27, lines 48-61, "The packet filter... standard Ethernet proto-cols")
- matching a cluster number associated with a data packet to a corresponding cluster number associated with said routing-table entries (column 28, lines 55-67, "the packet filter...be transmitted onto"; column 29, lines 1-5, "the LAN 220...be read again")
- routing said data packet based on a routing-table entry selected from a group of routing-table entries based on the cluster number and the destination address associated with said data packet (column 10, lines 15-31, "The address re-routing...as defined below")



**Regarding claim 32:**

*Donahue et al* further teaches,

- replacing said cluster number of said data packet with a new cluster number when said packet is routed (column 10, lines 33-53, "an agent might...will be tried")

**Regarding claim 33:**

*Donahue et al* further teaches,

- searching routing-table entries associated with said cluster number using a destination address associated with said data packet as an index (Fig. 18, item 615; Fig. 20, item 650; column 28, lines 44-50, "The field programmable...SRAM bus architecture"; column 22, lines 42-65, "The Channel Cluster...number of channels"; column 23, lines 1-7, "The overall table...number of clusters")

**Regarding claim 34:**

*Donahue et al* further teaches,

- grouping routing-table entries into clusters (column 10, lines 1-14, "The ISP or...a conflicting address")
- assigning a Cluster Number (Incoming) and a Cluster Number (Outgoing) to each routing table entry (column 7, lines 6-11, "At each interconnection...to all routers"; column 8, lines 26-47, "IP Multicast uses...different permanent addresses"; column 34, lines 50-67, lines "The transponder unit...be implemented, the connec-"; column 35, lines 1-26, "tors between the printed...the transponder unit")

- assigning a Cluster Number (Incoming) to a data packet (column 17, lines 46-53, "the controller unit...individual transponder units"; column 27, lines 48-61, "The packet filter... standard Ethernet proto-cols")
- matching the Cluster Number (Incoming) associated with said data packet to a corresponding Cluster Number (Incoming) associated with said routing-table entries (column 28, lines 55-67, "the packet filter...be transmitted onto"; column 29, lines 1-5, "the LAN 220...be read again")
- searching routing-table entries associated with said Cluster Number (Incoming) of said data packet using a destination address associated with said data packet as an index (Fig. 18, item 615; Fig. 20, item 650; column 28, lines 44-50, "The field programmable...SRAM bus architecture"; column 22, lines 42-65, "The Channel Cluster...number of channels"; column 23, lines 1-7, "The overall table...number of clusters")
- routing said data packet based on a routing-table entry corresponding to the destination address associated with said data packet (column 10, lines 15-31, "The address re-routing...as defined below")

**Regarding claim 35:**

*Donahue et al* further teaches,

- replacing said Cluster Number (Incoming) of said data packet with the Cluster Number (Outgoing) associated with said selected routing-table entry when said data packet is routed (column 10, lines 33-53, "an agent might...will be tried")

**Regarding claim 36:**

*Donahue et al* further teaches,

- grouping routing-table entries into clusters (column 10, lines 1-14, "The ISP or...a conflicting address")
- assigning a Cluster Number (Incoming) and a Cluster Number (Outgoing) to each routing table entry (column 7, lines 6-11, "At each interconnection...to all routers"; column 8, lines 26-47, "IP Multicast uses...different permanent addresses"; column 34, lines 50-67, lines "The transponder unit...be implemented, the connec-"; column 35, lines 1-26, "tors between the printed...the transponder unit")
- assigning a Cluster Number (Incoming) to a data packet (column 17, lines 46-53, "the controller unit...individual transponder units"; column 27, lines 48-61, "The packet filter...standard Ethernet proto-cols")
- matching the Cluster Number (Incoming) associated with said data packet to a corresponding Cluster Number (Incoming) associated with said routing-table entries (column 28, lines 55-67, "the packet filter...be transmitted onto"; column 29, lines 1-5, "the LAN 220...be read again")
- searching routing-table entries associated with said Cluster Number (Incoming) of said data packet using a destination address associated with said data packet as an index (Fig. 18, item 615; Fig. 20, item 650; column 28, lines 44-50, "The field programmable...SRAM bus architecture"; column 22, lines 42-65, "The Channel Cluster...number of channels"; column 23, lines 1-7, "The overall table...number of clusters")

- routing said data packet based on a routing-table entry corresponding to the destination address associated with said data packet (column 10, lines 15-31, "The address re-routing...as defined below")
- replacing said Cluster Number (Incoming) of said data packet with the Cluster Number (Outgoing) associated with said selected routing-table entry when said data packet is routed (column 10, lines 33-53, "an agent might...will be tried")

### **Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- *Donahue et al*; U.S. Patent Number 6,101,180
- *Nowatzky et al*; U.S. Patent Number 5,754,789; Apparatus and Method for Controlling Point-to-Point Interconnect Communications Between Nodes
- *Behaghel et al*; U.S. Patent Number 5,848,242; Local Area Network Interconnection System Implementing a Routing Protocol of the "Source Routing" Type and Interconnection Equipment Intended to be Used in Such a System
- *Graber et al*; U.S. Patent Number 5,812,769; Method and Apparatus for Redirecting a User to a New Location on the World Wide Web Using Relative Universal Resource Locators
- *Grady et al*; U.S. Patent Number 5,802,283; Method and System for Accessing Multimedia Data Over Public Switched Telephone Network

- *Tsuchiya*; U.S. Patent Number 5,583,996; Method and System for Shortcut Routing Over Public Data Networks
- *Ohta et al*; Hash parallel and label parallel routing for high performance multicast router with fine grain QoS control; Internet Workshop; 18-20 Feb. 1999 pp 13 - 16
- *Metz*; At the core of IP networks: link-state routing protocols; IEEE Internet Computing; Vol. 3, Iss. 5; Sept.-Oct. 1999; pp 72 - 77
- *Kronenberg et al*; VAXclusters : A Closely-Coupled Distributed System ; ACM Transactions on Computer Systems (TOCS); May 1986; Vol. 4, Iss. 2
- *Liu et al* ; A scalable wireless virtual LAN ; Mobile Networks and Applications; September 1998; Vol. 3, Iss. 3
- *Cheriton* ; The V Distributed System; Communications of the ACM; March 1988; Vol. 31, Iss. 3
- *Ang et al*; StarT-Voyager : A Flexible Platform for Exploring Scalable SMP Issues; Proceedings of the 1998 ACM/IEEE conference on Supercomputing (CDROM); November 1998
- *Lumetta et al*; Multi-Protocol Active Messages on a Cluster of SMP's ; Proceedings of the 1997 ACM/IEEE conference on Supercomputing (CDROM); November 1997
- *Tsuchiya*; An Architecture for Network-Layer Routing in OSI; ACM SIGCOMM Computer Communication Review , Proceedings of the ACM workshop on Frontiers in computer communications technology; August 1987; Vol. 17, Iss. 5
- *Quarterman et al*; Notable Computer Networks ; Communications of the ACM; October 1986; Vol. 29, Iss. 10

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- *Tsuchiya* ; Internet Routing over Large Public Data Networks using Shortcuts; ACM SIGCOMM Computer Communication Review , Conference proceedings on Communications architectures & protocols; October 1992; Vol. 22, Iss. 4

- *Hennessy et al*; SoftFLASH: Analyzing the Performance of Clustered Distributed Virtual Shared Memory; Proceedings of the seventh international conference on Architectural support for programming languages and operating systems; September 1996; Vol. 31, 30 Issue 9 , 5

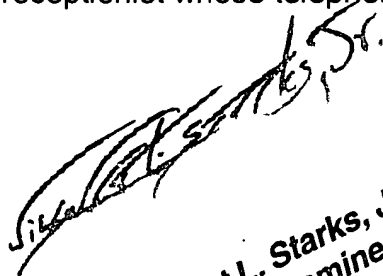
- *Karp et al*; GPSR: Greedy Perimeter Stateless Routing for Wireless Networks; Proceedings of the 6th annual international conference on Mobile computing and networking; August 2000

Any inquiry concerning this communication or earlier communications from the Office should be directed to Meltin Bell whose telephone number is 703-305-0362. This Examiner can normally be reached on Mon - Fri 7:30 am - 4:30 pm.

If attempts to reach this Examiner by telephone are unsuccessful, his supervisor, Anil Khatri, can be reached on 703-305-0282. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

MB/ *M.N.*



Wilbert L. Starks, Jr.  
Primary Examiner  
Art Unit - 2121